

Fortnightly Sermon

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THE EARTH'S FRIENDLINESS

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THE EARTH'S FRIENDLINESS.

"And the Lord shut him in."—GENESIS VII. 16.

We are parting with a summer of Elysian weather. By night or by day, it has seemed that we might glory in perfection. It is possible that on no other planet, revolving about any of the great suns which deck our night-skies with their fires, have these many days displayed more beauty to the eye or more satisfaction to any sense. Heaven has emptied itself at our feet in Paul's three glories, of the sun, of the moon and of the stars. We have walked in their light on the other glory, the terrestrial.

As I walked alone one evening, mayhap I was in good mood to accept the greeting of Diana the radiant; but however, she shone down on me impartially, and I bethought me what a van-guard of morals and peace the moon is. Suppose we had not our handsome satellite, and all the nights were pitchy black. I apprehend that many evils which now skulk out of sight on moonlit nights would stalk abroad on all nights, the dark hours sheltering dark deeds; and when we consider the force of habit, of unimpeded employment, of unhindered indulgence, it may be safe to think that the absence of our benign luminary, whereby the darkness would be increased, much would enlarge the crimes of night and add many to those of day. Therefore, probably, without our moon, we should be many centuries short of our present civilization. Great cities would not have been possible so soon. Hence superstition and ignorance would have flourished longer and stronger. Violence and crime would have grown so great that hardly would many ages have brought forth order and knowledge enough to devise lamps that would make safe those aggregations of men in which art, science and wealth arise.

The discovery not long ago of the satellites of our neighbor Mars, opened a curious question. Why were these little moons never discovered before? Differing answers have been given. But one theory is that Mars never before had any moons; that by a fortunate combination of circumstances the planet picked them up somewhere, getting them into its sphere of attraction, probably from the asteroidal belt of our system—a ring of small bodies revolving about the sun between Mars and Jupiter. This belt, according to one theory, has supplied the present moons of the planets, and possibly, from time to time, may supply others. If this chance to be the true explanation, think what a prodigious thing for Mars—supposing our small but ruddy neighbor inhabited, as is highly probable—to be suddenly invested with these moons, gleaming athwart her previously inky nights. Very likely her black nights, in that case, have been like a wall reared to the sky, resisting progress in virtue, arts and knowledge, justifying, like enough, the earthly name of the planet by holding it in the martial or warlike stage of progress, when violence flourishes, and robbery stalks in darkness. Possibly the lack of night-light has prevented the growth of such large cities as cover our earth; in which case Mars was for long time and might be still in the ecclesiastical period of superstitious submission to priests, this being the fate of scattered populations who till the soil, until the growth of cities and of manufactures rescues society from spiritual tyranny. Now, suppose, over this lawlessness and rudeness suddenly beam two moons, small, yet much lighting up the darkness, illuminating streets and roads, making the nights safer, giving to peace and order advantages unknown before, endowing virtue with new eyes that she may walk where only vice dared grope. Suppose our earth should be so happy as to pick up another moon some fine night, so timed in its revolution that our nights were always brilliant with one luminary. I venture that law and order would take such a stride immediately as no one looks for from all our courts, seminaries and churches in a century.

But whether the nights be light or dark, one fact of them is a force for civilization which can not be overvalued; I mean sleep. How valuable is sleep for keeping things quiet, because so much time is absorbed by it. Conceive the tricks, de-

ceits, frauds, insincerities, hatreds, plots, robberies, violences, of our present condition, doubled on a sleepless world. What a terrifying picture ! Society could not endure. As it is, the most eager conspirator must stop plotting, to sleep. Orgies, riots, revelries, give way to repose. The criminal is harmless for his slumber-time. The violent classes are worn out once a day. All the mean and petty stealing of business ceases daily at twilight. If a gambler game all night, he can not also scheme all day, but must draw his window-blinds, and sleep. There are so many hours every day when no thief wishes to steal, no rioter to burn, no robber to lie in wait, no furious man to kill ; and often the plotting, the angry, ambitious, tempted, think better of it in the morning, and go on their way in the light, no one knowing and themselves disavowing what they were thinking of when sleep overcame them.

Meantime, they who study the starry heavens do so with the advantage of a central position, which certainly is a main gateway of civilization. We have been able to gain a clear idea of our planetary system because we are so near the sun. This great luminary being the center of all the orbits, the nearer to it the observer is, the simpler the motions appear and the more easily they are understood. If our earth were one of the remote planets, like Uranus, nineteen times our distance from the sun, or Neptune, thirty times our distance, the motions of the heavenly bodies would appear in a maze so complex and difficult that we still should be ignorant of their laws. Many ages possibly still would have to pass before we could unravel the seeming tangle, calculating, describing, mapping the orbits and perturbations, as now we can with the advantage of our central place. And as civilization depends so much on astronomical knowledge, by which alone measures and standards of time can be had, by which also men are lifted above superstition, we should be still held, by these great distances from the sun, in a long and painful struggle to emerge from barbarism.

If to this advantage and effect of our central position, we add the importance of the size of the earth to our civilization, we shall be still more conscious of the physical conditions which have produced our happiness. As long as men are separated widely in space and time, they will be unprogressive and helpless, living

in hordes more or less migratory, or in poor and enslaved agricultural communities on the one hand, and in warlike marauding tribes on the other. It is when men begin to travel over the earth more quickly that manufactures and commerce arise, which create arts whereby the transit is quickened still more and thereby the commerce again enlarged, the earth subdued by roads, men informed by intercourse, and nations trained to peaceful industry by common interest and merchant navies. It can not be guessed, therefore, by what ages our civilization might have been held back, if instead of the little distances of the waterways and continents of this earth, of whose circumference our own country, from sea to sea, comprises one-eighth, we had to traverse the enormous distances on the surface of Uranus or Neptune, thirteen and seventeen times the size of the earth, or of Saturn, ninety times, or of the gigantic globe of Jupiter, three hundred times the earth's mass.

It is thus that we may liken the sidereal spaces to a great deluge, in which this little ark of safety, the Earth, and, not to be selfish, no doubt other arks, like neighbor Mars, for example, whose configuration perhaps we can dimly make out from our windows,—go rolling on the face of the waters;—and the Lord has shut us in. He has shut us in with much compulsory happiness, or, at the lowest rating of it, a certain impunity whereby we are saved from much injury, and with aids and protections whereby mind and morality may grow,—with a globe of short girth and central position, with a moon, and with sleep.

As to this earth in which the Lord has shut us in, some persons will have it that an end is predicted and destruction will overtake it. No whit startling is the notion of an end of it, since it has had many geological phases through countless ages, and must have passed at some time through what we may call its beginning. Some say, that however we explain the traditions of an ancient deluge, it is certain there will be one in the future. The pole, it is said, now points to the north star by virtue of gravitation, by reason of the bulk of mineral matter around the pole. The eroding action of the water is carrying this mineral weight away gradually and depositing it in the watery belt around the bulge of the equator. Therefore we see rocky coasts toward the north but in the south sandy flats. How far this

process has gone we cannot tell, but it is asserted that it will continue until some point on the equator become heavier than the polar land, whereupon suddenly the earth will roll over to bring this heavy point to the north star, by which the axis will be changed and the ocean poured violently over half the earth in a terrific flood, sweeping off immense areas of living beings, submerging continents and raising others, and reversing the present climates. Others again say the earth meets a steady resistance in its orbit by the tenuous matter diffused through space, by the friction of which the earth must lose its motion gradually and fall into the sun. It is said also that the geological history of the planet foretells a decrepitude or old age, because the atmosphere will be absorbed and fixed in solid compounds on the surface, water will disappear, life will become extinct. "As the earth keeps cooling," we are told, "it will become porous, and great cavities will be formed in the interior, which will take in the water. It is estimated that this is now in progress; so far the water diminishes at about the rate of the thickness of a sheet of writing paper each year. At this rate in 6,000,000 years the water will have sunk a mile, and in 15,000,000 years every trace of water will have disappeared from the face of the globe. The nitrogen and oxygen are also diminishing all the time. It is in an inappreciable degree, but the time will come when the air will be so thin that no creatures we know could breathe it and live; the time will come when the world can not support life. That will be the period of age, and then will come death." We are told, again, that every thing runs its proper course and ends; that, however it be with the individual man, we must expect the race to follow the course of all other species; that even now it is probable we have reached the height and must begin our long decline; that the most brilliant intellectual epochs of man's existence are nearly closed; that different sciences unite in fixing the period of intellectual life on a planet of this size to a very limited period compared with its past history; and that probably more than half of this period is already gone; that signs of decrepitude appear; that the American natives die out, the Tasmanians have gone, the Australians diminish, the New Zealanders and Pacific tribes are disappearing, and that even in our own race old age embraces a larger portion of life, showing a failure

of vitality. Meantime we hear of remote suns that suddenly blaze up and shine with great brightness for a time, and then sink to their former state or disappear. Already has our sun cast out gigantic flames, which wrought magnetic perturbations and startling electric phenomena on the earth; if he should flame up like some of those remote cosmic bodies, the earth instantly would be dissolved in fiery vapor.

There can be no doubt that with our present knowledge some of these predictions seem *probable*. Whatever *certainty* may be claimed by some, in my view it is too early in the day to foretell the evening. With all our boasted knowledge, I apprehend that the complexity of cosmic possibilities is beyond any present elucidation which can justify dogmatism, and that the details of geologic changes and the moral and physical destinies of humanity on this planet yet are far beyond inductive demonstration. But however, the stretches of time which we must contemplate are enormous. If the earth be to fall into the sun or the atmosphere to be solidified into metallic oxides, it is admitted that the catastrophe is distant by millions of years. Meantime, "still stands the forest primeval," still the tides oscillate, the rivers run, the sun rises gloriously and lifts clouds to screen his heat, the rain falls soft as down, the moon decks the slumber of innocence. All that ministers to the human soul and fills the earth with splendor, yet will create æons of gladness and overflow the earth with children's peals and love's delights and thought's raptures; so that the earth shall be heavier with happiness than with its mineral kingdom, and, as it were, the weight of human joy shall relinquish it to the bosom of the sun. What a great glory! If the chapter shall be finished, 'tis but a short passage in the cosmic work, and yet how crammed with magnificence of blissful experience! I think that we shall lay it down with a happy sigh, relieved to read no more for that time, till we have learned to bear what already we have perused of beauty and of joy. There will be no waste. Nothing will be lost. 'Tis yet impossible for us to say how the small and simple things or lowly creatures on this earth are economized in respect of its own surface. Little by little we explore the wonderful web of dependencies and find the place and value of each thing, from love and thought to an earth-worm, Mayhap from some

inconceivable altitude the astonished human family will look down on the last prodigious convulsion of this little ball which trundled us through space, and see how the matter of which we know so little gathers itself for new evolutions of joy after finishing its part in ours.

Nay, we never shall know the secret of matter, for the mystery of the body and the mystery of the soul are one. Both end in the eternal, to know which were death for the finite. But I see that nature sets her seal on individual life and surrounds it with sanctions and protections. I fear no cataclysms. What if at this moment while I speak some gigantic flames of hydrogen from the sun shooting out millions of miles should vaporize the earth instantly! There would not be one whit less of life or of joy in the universe. Visible species would disappear; so they may disappear on this earth's surface by slow or sudden geologic changes, the human for aught we now can prove no less than others. But by whatever other senses or in whatever other relations to be known, the individual is set forth indestructible; and for this I wish to appeal, at this moment, not to the mind with its deathless fires of aspiration and love, but to physical nature; that we may see in what kind of ark the Lord has shut us in, and how he has shut us in by such precautions for mental life and moral glory as constrain us to go some way toward him, that then we may see and follow after his eternal beauty with worship. It has been said very often, when men have talked over their fate in view of the mystery of death, and many have sought anxiously to find some sanctions or hints in physical nature that they shall live still in altered modes,—it has been said very often that nature cares nothing for the individual but only for the species; that nature has great solicitude to perpetuate the kind and preserve the type or species, but is unconcerned about the fate of any one or more individuals, who may perish and welcome, when it happens so. This seemed quite conclusive, and they who could not rid themselves of a persuasion of immortality left nature to its dead and appealed to the powers of the mind for proof against death. Now, at last, science invites us probably to go back and pick up these dropped strands, and rectify our interpretations. If "the energetic passion of repose" with which the mind embraces life, be

indeed the dew-fall of a sky which is all life, it would be passing strange if no drops thereof were found on the face of matter but only the dust of death. Now I see science begins to teach that by no means it is to *preserve* the species that Nature is careful, but to *improve* the species, not to maintain the kind intact but to alter it continually to attain better kinds; and that to this end she is watchful to guard the individual and surround the best or strongest or most highly organized or most beautiful with special and wonderful modes of protection, maintenance, and perpetuation. By this a constant "natural selection" goes on which cherishes the individual and thereby develops a nobler race wonderfully by fortifying its noblest individuals. This process goes on till by the slow change of body and soul under Nature's care, man is reached. Then we see a slow but total revolution, a wonderful change in the direction of the law. The body then begins to alter very slowly. It becomes sensibly fixed and stationary, because a power has come into prominence called mind, which itself is able to shape Nature, to modify her works, to will and to do. Henceforth Nature drops the body mainly to the care of that crowning mind, and takes up that mind itself whereon still to work her wonders of selection, and still to cover with solicitude the best and most beautiful individuals. Thus the crown of effort, the desire of all creatures, the love of Nature is set on the mind of man, in which individuality triumphs and the fires of immortality were kindled while the body yet was misshapen and wretched.

Beautiful and moving is it to see (if here I may take a side-glance at it) how the energy of Nature unfolds and enforces mere *happiness*; for happiness is a glory of creation. However much may be said about the pleasures of animals in their wild freedom, it is to be feared the picture is overdrawn. The wild stag indeed "feels" the trees with his antlers in the pride of strength. The elephant fans himself, according to the habit of those sagacious creatures, with boughs of trees broken off by him for that purpose. There are ecstatic careerings of birds in the air, and floods of melody from swaying tree-tops. There are dartings of sunny fish in clear waters. No doubt there is an uproar of gaiety in tropical luxuriance, which tops the struggle of life as a flower beams on a cactus. Animals often display an

"antic disposition" and great sportiveness. Still, probably the life of wild creatures is laborious, tremulous, fear-haunted; often they go hungry; they are frightened continually; constantly they must run or fight for life, according to their nature, and even the timorous and poorly armed sometimes must do battle under the impulse of the parental instinct, when their young are threatened. Scientific observers say that "the life of all beasts in their wild state is an exceedingly anxious one; that 'every antelope in South America has literally to run for its life once in every one or two days upon an average, and that he starts or gallops under the influence of a false alarm many times a day.'" But indeed this fact any one may observe, here or anywhere, who will but notice the birds carefully. And can anything be more terrified and anxious than the life of a stray cat, or more sorrowful, cringing, spiritless and famine-struck than the days of a vagrant dog?

It is just so with a wild man. I suspect that in our sheltered life, we can not picture the misery of a savage. Indeed there is a charm, we fancy, in this life of liberty under the trees, with no conventional cares, none of the toils which tax luxury or convenience. Possibly we give scope to a poetic imagination, picture a "noble savage" in colossal form and fine proportions, admirable for strength, courage, perhaps magnanimity and other brave virtues, and endowed with a wild, rough radiant happiness. But this picture is a mirage on a fog. The blithe exuberance of a Brazillian forest has little joy for the wild man. He is a wretched, stooping, ill-shaped creature, low in stature, ferocious but not brave, the victim of tortures and of perpetual fear. Lubbock reports him "always suspicious, always in danger, always on the watch;" Darwin writes "The astonishment which I felt on first seeing a party of Fuegians on a wild and broken shore will never be forgotten by me. * * * These men were absolutely naked and bedaubed with paint, their long hair was tangled, their mouths frothed with excitement, and their expression was wild, startled and distrustful. They possessed hardly any arts, and, like wild animals, lived on what they could catch."

But this is not the divine purpose. From this misery, man is shut out. He can go in it but a little way. He is shut in to happiness. He must go in at the gate of it, and find the heart

of the garden. It is a saying of Emerson that when the Lord wishes to accomplish anything, "he impresses his will in the structure of minds,"—we may add also in the structure of the abode of mind, the body, and of the abode of the body, the frame of earth and sky. In the mind of man the Providential will is set and sealed, a will which also has wrought in all things for man's glory and joy. However abject and wretched in his beginning, man alone is endowed with the mysterious secret of progress, urged by a sublime wonder in his nature to seek a better state as surely as flame seeks the sun; and the Lord has shut him in and compelled him to greatness and happiness. This is done by all the agencies of the physical creation which work wonderfully together to constrain man to grow good, wise and happy. Over all creatures the same laws work. By a selection which every instant testifies to loving-kindness at the heart of things, the best bodies are chosen to live,—the finest organisms, the most beautiful forms, the creatures who by structure *can enjoy the most* and fill nature with the most loveliness and bliss. By this process, bodies and intelligencies are refined and enlarged until man is reached; when suddenly, so far as yet we know, by a strange and wonderful leap, a mind appears capable of storing experience, of creating language, of progress. Even after this, only by long ages of nature's toil the end is attained. Still a rough uncouth body is to be refined, the vocal cords strung tunefully, the dome of the head rounded, the face beautified. But from the moment when this royal mind appears, nature gradually drops the body to concern herself with the selection of mind. The body becomes nearly stationary. The man himself begins to work back on nature, to mould her great processes by right of his will and intelligence; and, Nature, most tender of that will which is achieving command in her, and glorying in that mind which can read the star-book of the skies, survey the winds, map the oceans, penetrate the secrets of the globe's structure, Nature, I say, leaves it to man himself to continue the selection of bodies, by his own intelligence; but she sits in jealous judgment continuing her selection of minds.

I quote after Lubbock the following from Wallace: "With a naked and unprotected body, this ["that subtle force we term mind"] gave him clothing against the varying inclemencies of

the seasons. Though unable to compete with the deer in swiftness, or with the wild bull in strength, this gave him weapons wherewith to capture or overcome both. Though less capable than most other animals of living on the herbs and the fruits that unaided nature supplies, this wonderful faculty taught him to govern and direct nature to his own benefit, and make her produce food for him when and where he pleased. From the moment when the first skin was used as a covering, when the first rude spear was formed to assist in the chase, the first seed sown or shoot planted, a grand revolution was effected in nature, a revolution which in all the previous ages of the world's history had had no parallel; for a being had arisen who was no longer necessarily subject to change with the changing universe.—a being who was in some degree superior to nature, in as much as he knew how to control and regulate her action, and could keep himself in harmony with her, not by a change in body but by an advance in mind.

Here then we see the true grandeur and dignity of man. On this view of his special attributes, we may admit that even those who claim for him a position and an order, a class or a sub-kingdom by himself, have some reason on their side. He is indeed a being apart, since he is not influenced by the great laws which irresistibly modify all other organic beings. Nay, more; this victory which he has gained for himself gives him a directing influence over other existences. Man has not only escaped natural selection himself, but he is actually able to take away some of that power from Nature which, before his appearance, she universally exercised. We can anticipate the time when the earth will produce only cultivated plants and domestic animals; when man's selection shall have supplanted natural selection, and when the ocean will be the only domain in which that power can be exerted which for countless cycles of ages ruled supreme over the earth."

To this great work all powers are marshaled. By one law or process after another in the realm of matter, the Lord has shut man in to spiritual power and happiness. To sketch the aids bestowed on him, or rather the compulsions that shut him in, would be the same as to detail the wonders of the sciences and to count all the serviceable ways of water, earth, air, clay, and arable soils, stars, moon, and the seasons, climates, mountains

and valleys, rivers and springs, forests, rocks, metallic ores, animals, birds, fishes, insects. But the most impressive way, perhaps, in which the Lord has shut us in, is by the balance of advantages and difficulties. On the one hand you will find a propitious climate, a soil not too fertile, an atmosphere neither too moist nor too dry, no overwhelming depressing exuberance of nature, but a fair return for effort and a free field for the exercise of man's energies, enterprise and arts. On the other hand in this same favored place, you will find mountains that must be tunneled, rivers that must be bridged or dredged, immense tracts of land to be rescued from the sea, waters pushed back by great dykes, dangerous shoals or rocks which wreck one vessel after another till triumphs of engineering build lighthouses on them, miasmatic swamps that must be drained and ditched, sandy impediments which must be crossed by canals. All these works are done, and the advantages by which Nature has developed in man the arts, knowledge and courage to undertake them, find their crowning advantage in the discipline of him by these same difficulties, and the hardihood and daring of mind which the victory nourishes.

Man may be viewed as thought, will and feeling. See how he is shut in to unfold these. He alone can escape misery by progress; he alone is wretched unless he advance. Of all creatures, he alone begins where he shall not stay, and is miserable in a wild state by a sort of wonderful prescience of the joys that await his species. His brute fellow-beings are equipped at once with comparative perfections, with teeth, claws, tails, that are weapons and tools, with skins that are warm and tough garments of wool and hair. Man alone is driven to invent if he will not be naked to the cold and helplessly weak. Other creatures with all their anxieties and wars, are a part of Nature's exuberance, and suffer no opposition save in the general process of Nature's bodily selection and in the preying of one on another which keeps the balance of life. But all oppose themselves to man; the very prodigality of nature is his foe till he learns in temperate and sterile soils how to battle with the tropical. Meantime he must extirpate beasts and birds of prey, invent ways of communication, make roads and vehicles, do away with diseases and famines. All this he has done triumphantly; the most cruel plagues, leprosies, fevers have disappeared; and

whereas frightful famines formerly desolated Europe several times in a century, now scientific authorities declare such a calamity impossible, through the advance of chemical knowledge. These forces have shut in the *intellect and will* to their appropriate discipline on the one hand and necessary advantages on the other. For *feeling*, is spread out all the magnificent color, light, form and sound of Nature which unite in exalted beauty. These lead out the admiring spirit by sense of sight and of hearing, to answer to the magnificence of fire and water and their geological workmanship. It is the subtle remark of a great student of men that "as the beauty of the material world mainly depends on that irregularity of aspect without which scenery would have presented no variety of form and but little variety of color, we shall, I think, not be guilty of too refined a subtlety, if we say that fire, by saving us from the monotony to which water would have condemned us [by its wearing of all things down to a level], has been the remote cause of that development of the imagination which has given us our poetry, our painting and our sculpture, and has thereby not only wonderfully increased the pleasures of life, but has imparted to the human mind a completeness of function to which, in the absence of such a stimulus, it could not have attained."*

Of these balanced advantages and disciplines of nature by which the Lord shuts us in, there are majestic stores yet waiting. When we advance to do battle with the tropics, we shall find difficulties such as never yet we have battled with, and a corresponding greatness of reward to victory, and even of advantages by the way, when knowledge and virtue shall grow stalwart enough to deal with this prodigious and swarming life. I take from Buckle an eloquent paragraph descriptive of the resistance of nature to man in Brazil: "Brazil, which is nearly as large as the whole of Europe, is covered with a vegetation of incredible profusion. Indeed so rank and luxuriant is the growth, that nature seems to riot in the very wantonness of power. A great part of this immense country is filled with dense and tangled forests, whose noble trees blossoming in unrivalled beauty, and exquisite with a thousand hues, throw out their produce in endless prodigality. On their summits are perched birds of gorgeous plumage which nestle in their dark and

* Buckle.

lofty recesses. Below, their base and trunks are covered with brush-wood, creeping plants, innumerable parasites, all swarming with life. There, too, are myriads of insects of every variety; reptiles of strange and singular form; serpents and lizards spotted with deadly beauty; all of which find means of existence in this vast workshop and repository of nature. And that nothing may be wanting to this land of marvels, the forests are skirted by enormous meadows, which, reeking with heat and moisture, supply nourishment to countless herds of wild cattle, that browse and fatten on their herbage; while the adjoining plains rich in another form of life, are the chosen abode of the subtlest and most ferocious animals, which prey on each other, but which it might almost seem no human power can hope to extirpate. Such is the flow and abundance of life by which Brazil is marked above all the other countries of the earth. But amid this pomp and splendor of nature no place is left for man. He is reduced to insignificance by the majesty with which he is surrounded. The forces that oppose him are so formidable that he has never been able to make head against them; never able to rally against their accumulated pressure. The whole of Brazil, notwithstanding its immense apparent advantages, has always remained entirely uncivilized; its inhabitants wandering savages, incompetent to resist those obstacles which the very bounty of nature has put in their way.

* * * The physical causes are so active and do their work on a scale of such unrivaled magnitude, that it has hitherto been found impossible to escape from the effects of their united action. The progress of agriculture is stopped by impassable forests and the harvests are destroyed by innumerable insects. The mountains are too high to scale, the rivers are too wide to bridge; everything is contrived to keep back the human mind, and repress its rising ambition."

But, I think, it follows from all the past triumphs of thought and will in art, enterprise and knowledge, that when a knowledge great enough is gathered, and arts potent enough follow the knowledge, we shall lack neither will nor power to grapple with even this wilderness and subdue it to the service of man. It is the gymnastic of nature. It is the task before us to which we are shut in, which we shall find, above all our experiences, prodigious both in advantages and in discipline. When the

work is done,—who can tell how many ages hence or under what conditions of mighty engines and subtle arts?—the glories of it will surpass all powers of language or imagination, nor can we conceive what the race may be when capable of this victory. Then into this great canopy spread out by Thought and Will, Feeling will step forth, in royal purple, into such enchantments as Scheheredzade never dreamed of, such scenes of majestic beauty as might be called bewildering now; but an enlarged sense will comprehend and enjoy them with rapture. I think religion may glow with this anticipation. I believe that in such a scene the songs of human praise will be like the repetition, in that fulness of time, of the song of the morning stars when all the glory set out; and that men will know it is the Lord who has shut us in.

Thus, in a brief sketch or mere suggestion, by which I but tip-toe the threshold of nature's method, I have tried to show man and nature working together, and the material world with all its shapes and substances conspiring for mind. Hamilton says, "In nature there is nothing great but man, in man there is nothing great but mind"; but I would rather say that the greatness of Nature selects her best things for man's greatness and nurses him in divine ways, till he can join with her in selection by the powers of thought and will, and rejoice in her spiritual meanings by the powers of feeling. Till that great wonder appears which from the side of natural objects we may call a progressive species, from the side of individual experience, the human mind, it is as if Nature slept unconscious; but then suddenly in this recumbent first man nature begins to dream, and at last "*dreams of its dream*," and so awakes.*

This word "dream" recalls noble words of Wasson, where-with I will end: "Conceive the situation of the animal man in the midst of the physical universe. What an insect, what an atomy, what an insignificance he appears! Without natural clothing, without natural weapons, wanting the wing and eye of the falcon, wanting the scent, speed and native cunning of the fox, a mere mouthful to some of his animal neighbors, feeble in instinct, delicate in digestion, more sensitive and susceptible of pain, and less supplied by nature with ready-made supply than any other creature,—he exhibits the maximum of want and the

* "We are near waking when we dream that we dream."—*Novalis*.

